CLAIMS:

What is claimed is:

1. A data management appliance, comprising:

a random-access storage unit; and

control circuitry adapted to receive commands from a host computer system,

wherein in response to the control circuitry receiving a write command from the computer system, the control circuitry updates the random-access storage unit to include information associated with the write command and

in response to a read command including a logical address and a time value, the control circuitry retrieves, from the random-access storage unit, data representing contents of the logical address at a time represented by time value.

2. The data management appliance of claim 1, wherein the write commands are replicated from write commands issued to a primary storage device.

3. The data management appliance of claim 1, wherein the write commands are received from the computer system through a replicating controller.

4. The data management appliance of claim 1, wherein the write commands are replicated by the computer system.

5. The data management appliance of claim 1, wherein the random-access storage unit stores a forward journal.

6. The data management appliance of claim 1, wherein the random-access storage unit stores a mirror-in-the-middle (MIM) containing a copy of contents of a primary storage device at a fixed point in time.

7. The data management appliance of claim 6, wherein the random-access storage unit stores at least one snapshot containing changes, that when made to contents of the mirror-in-the-middle (MIM), would result in a previous version of the contents of the primary storage device.

8. The data management appliance of claim 7, wherein the control circuitry stores a mapping object, wherein the mapping object maps logical addresses into physical addresses on the mirror-in-the-middle (MIM) and contained in the at least one snapshot.

9. The data management appliance of claim 1, wherein the control circuitry receives commands from the computer system through a storage network.

10. The data management appliance of claim 1, wherein the random-access storage unit includes memory.

11. The data management appliance of claim 1, wherein the random-access storage unit includes a disk.

12. A data management appliance, comprising:

a random-access storage unit; and

control circuitry adapted to receive commands from a computer system,

wherein in response to the control circuitry receiving a write command from the computer system, the control circuitry updates the random-access storage unit to include information associated with the write command;

in response to a mount command including a time value, the control circuitry configures itself to perform future read operations with respect to a fixed time represented by the time value; and

in response to a read command including a logical address, the control circuitry retrieves, from the random-access storage unit, data representing contents of the logical address at the fixed time.

13. The data management appliance of claim 12, wherein the write commands are replicated from write commands issued to a primary storage device.

14. The data management appliance of claim 12, wherein the write commands are received from the computer system through a replicating controller.

15. The data management appliance of claim 12, wherein the write commands are replicated by the computer system.

16. The data management appliance of claim 12, wherein the random-access storage unit stores a forward journal.

17. The data management appliance of claim 12, wherein the random-access storage unit stores a mirror-in-the-middle (MIM) containing a copy of contents of a primary storage device at a fixed point in time.

18. The data management appliance of claim 17, wherein the random-access storage unit stores at least one snapshot containing changes, that when made to contents of the mirror-in-the-middle (MIM), would result in a previous version of the contents of the primary storage device.

19. The data management appliance of claim 18, wherein the control circuitry stores a mapping object, wherein the mapping object maps logical addresses into physical addresses on the mirror-in-the-middle (MIM) and contained in the at least one snapshot.

20. The data management appliance of claim 12, wherein the control circuitry receives commands from the computer system through a storage network.

21. The data management appliance of claim 12, wherein the random-access storage unit includes memory.

22. The data management appliance of claim 12, wherein the random-access storage unit includes a disk.